
**ASBESTOS SURVEY
PG INVESTMENTS
620 ST. CYR ROAD
BELLEFONTAINE NEIGHBORS, MISSOURI**

Prepared for:

PG INVESTMENTS

Bellefontaine Neighbors, Missouri

Prepared by:

GEOTECHNOLOGY, INC.

St. Louis, Missouri

January 19, 1993

2293.01.2120

REPORT\229301.ASB



30290754

0400

PROJECT BACKGROUND

PG Investments owns the property located at 6021 St. Cyr Road in the City of Bellefontaine Neighbors, Missouri. The site consists of approximately 40 acres, formerly owned by Certain-Teed Products, an asbestos pipe manufacturer. The United States Environmental Protection Agency (USEPA) recently visited the site to inspect for suspected asbestos piping debris along Maline Creek. The waste was purported to be part of a closed landfill used by Certain-Teed. While visiting the site and inspecting for the suspect waste, the USEPA representative observed other portions of the property. During this inspection, the representative noted areas, including a vacant and locked boiler house and other outside piping, which contained suspect asbestos-containing building materials (ACBM). The USEPA representative alerted the property owners that if asbestos was identified, it may be releasing fibers into the outside air and suggested it be removed.

Geotechnology, Inc. was contacted by Mr. Mike Kootman, President of Branch Metals, a metal recycling operation which leases 60,000 square feet of space in one of the two major warehouse structures on the site. Mr. Kootman requested that a Geotechnology representative meet him at the site to observe these conditions and make recommendations pertaining to the asbestos issues.

A meeting with Messrs. Mike Kootman and Phil Kootman (co-owner of PG Investments and of the property), was conducted on November 27, 1992, followed by a site walkover. Mr. Phil Kootman was interested in addressing the immediate concerns of the USEPA as well as other environmental concerns associated with the facility. These concerns included the potential presence of friable asbestos and its exposure to outside air. Geotechnology submitted Proposal No. 2293.01.2120 dated December 10, 1992 which included a scope of work to primarily address the concerns of the USEPA. A copy of this proposal is located in the Appendix. Mr. Mike Kootman authorized Geotechnology, Inc. to proceed with these services on December 11, 1992.

SCOPE OF WORK

The scope of work was broken down into five phases to coordinate with schedule and project methodology.

PHASE 1

Sampling of five suspect ACBMs was performed on materials located in two areas. Please refer to the site plan (Plate 1) for bulk sampling locations. Four samples were taken outside in the area of the boiler house, including:

Sample No.	Description	Condition
BRMTL 1	Debris pile (approximately 1 cubic ft)	Friable
BRMTL 4	Thermal systems insulation (piping)	Friable
BRMTL 3	Thermal systems insulation (piping)	Friable
BRMTL 5	Transite insulation	Friable

Excluding BRMTL 5 materials, we understand these materials were noted by the USEPA. An additional sample was taken at the Branch Metals facility. It was as follows:

Sample No.	Description	Condition
BRMTL 2	Suspect cement dust	Friable

All materials sampled contained asbestos of different types and varying percentages; the analytical results we included in Table 1 and attached as Appendix A. The latter sampling and follow-up air monitoring was performed to address the potential asbestos exposure to employees working in the Branch Metals facility.

PHASE II

The positive identification of asbestos in the initial samples taken prompted the owner to have asbestos abatement performed in two areas. The primary abatement included removal, transport, and disposal of the thermal systems insulation (BRMTL 4) found in the abandoned outside piping and manifold. In addition, the ACBM debris (BRMTL 1) was removed. Geotechnology assisted during this phase by pre-qualifying abatement contractors, specifying the scope of work, negotiating with contractors, and arranging for air monitoring to be performed.

The abatement was successfully completed in one day by Environmental Control and Abatement. A copy of the NESHAPS notification and company credentials are included in Appendix B.

PHASE III

As a result of the positive identification of asbestos (3 to 5% chrysotile) in the cement dust (BRMTL 2) sampled in the third level of Building 1 which is a non-operational area of the Branch Metals facility, air monitoring was performed in the areas (Buildings 2 & 3) where operations were conducted. Although operations were not conducted in Building 1, there was a concern that asbestos fibers could have migrated into this area.

Air sampling was performed in six locations (Sample Nos. 5-10) within Buildings 2 and 3 of the facility. The analytical tests were performed using NIOSH Method 7400, phased contrast microscopy; only two samples were quantifiable and they were below the action level (0.1 fibers per cubic centimeter). In addition, two air samples (Sample Nos. 3 and 4) were taken in the north end of the adjacent warehouse, in the vicinity of the small area occupied by Gateway Trucking. A power failure yielded no results from one area (Sample No. 4); however, a non-quantifiable reading was detected from the other sample. All sampling and microscopy was performed by ATC Environmental. A copy of the analytical results and ATC's qualifications are included in Appendix B.

PHASE IV

On December 17, 1992, USEPA representatives visited the site for a second time. The purpose of this visit was twofold. First, they wanted to determine the extent of buried asbestos piping waste. A USEPA-subcontracted drilling company, Professional Services Industries (PSI), drilled 12 holes to depths ranging from 10 to 20 feet. The holes were reportedly drilled within approximately 75 feet of Maline Creek and parallel to the creek. PSI indicated that suspect asbestos piping waste was encountered in each boring at depths ranging from 1 foot to 20 feet. No other suspect hazardous wastes were encountered. The USEPA will review the results of this work and determine a method of remediation. Based on conversations with Mr. Don Hamera, the USEPA Emergency Response Representative, this information will be provided in mid-January 1993.

The secondary purpose of the USEPA visit was to further inspect the property for the presence of ACBM. Mr. Paul Battey, a USEPA Environmental Engineer, accompanied Mr. Hamera during the inspection to sample suspect ACBM. A Geotechnology representative accompanied both individuals during their inspection of the vacant warehouse. The USEPA was informed that the owner was aware of the presence of suspected ACBM and was in the process of identifying, assessing, and abating it. The USEPA inspection expanded to the adjacent Branch Metals facility and outside areas, upon which additional bulk sampling was performed. We understand that, upon receiving analytical results, the USEPA will report back to the owner.

Subsequent to the USEPA visit, Geotechnology performed sampling in an additional 19 areas on the property, predominantly focusing on the vacant warehouse structure. The sampling locations are shown on Plate 2 and the results are summarized in Table 1 and included in Appendix A. All samples, except BRMTL 12, 14, 15, and 16 contained varying amounts of asbestos. The majority of the materials were friable as reflected in Table 1, the Asbestos Survey Results Summary. In accordance with the request of the owners, plans were initiated to perform asbestos abatement.

PHASE V

On December 29, 1992, Geotechnology met with two asbestos abatement contractors for the purpose of reviewing the scope of the project, followed by a walkover of the facility to detail areas to be abated. The abatement areas are identified in Table 1. Geotechnology is anticipating receipt of asbestos removal bids from these contractors by Friday, January 8, 1993 and will review the bids with the owner. Selection and NESHAPS identification should occur during the week of January 18, 1993.

Geotechnology will arrange for area and clearance air monitoring to be performed during the asbestos removal. In addition, we will observe that proper USEPA notification is made and waste transport and disposal is performed using qualified companies. A final walkover will be performed, followed by issuance of a brief report summarizing the results of the work.

RECOMMENDATIONS

The following are recommendations relative to the proposed asbestos work, as discussed in the Phase IV section of this report, along with additional suggestions relative to monitoring of the remaining asbestos. We have also included suggested additional environmental services to assure adequate compliance with existing regulations.

1. Perform asbestos abatement in the areas identified in this report.
2. Establish an on-going operations and maintenance program which includes monitoring the asbestos not abated. This will primarily include:
 - A. Employee asbestos awareness sessions
 - B. Worker protection programs
 - C. Basic operations and maintenance procedures
 - D. Special operations and maintenance cleaning
 - E. Procedures for asbestos fiber release episodes

3. Environmental compliance audit of the Branch Metals operations.
4. Phase I and II environmental site assessment of the property.
5. Consultant/attorney involvement regarding environmental issues relative to the entire property.

* * * * *

The following are attached and are a part of this report:

Table 1	-	Asbestos Survey Results
Plate 1	-	Branch Metal Facility - Air/Asbestos Sampling Plan
Plate 2	-	Vacant Warehouse - Air/Asbestos Sampling Plan
Appendix A	-	Analytical Results
Appendix B	-	NESHAPS Notification - Abatement Company Qualifications
Appendix C	-	Limitations of Report
Appendix D	-	Geotechnology, Inc. Proposal Nos. 2293.01.2120 & 2293.02.2120

* * * * *

Geotechnology has been pleased to be of service to you. If you have any questions regarding this report, or wish to discuss additional services, please contact the undersigned.

Very truly yours,

GEOTECHNOLOGY, INC.



W. Gary Simmons
Project Manager

WGS:rsw/tlp

Copies submitted: (2)

TABLE 1

ASBESTOS SURVEY RESULTS

Site Plan
Material Condition Assessment
Percentage of Asbestos Content

TABLE 1
ASBESTOS SURVEY RESULTS

Sample No.	Location	Type ACM	Condition	Quantity
⊗ BRMTL 1	Outside debris pile Outside, 40 ft east of boiler house	Transite 5 - 10% C 3 - 5% CR	Non-friable (3)	1.5 cu ft
Δ BRMTL-2	Original Bldg. 1 Level 3, south wall	Cement 3 - 5% C 1 - 2% CR 1 - 2% A	Friable (1)	21,000 sq ft (3 floors)
⊗ BRMTL 3	Debris adjacent to boiler house	TSI 20 - 25% A	Friable (1)	.5 cu ft
⊗ BRMTL 4	Outside, adjacent to auto claves	TSI 5 - 10% C 2 - 3% A	Friable (2)	15 sq ft
BRMTL 5	Outside, south corner	Transite with insulation 25 - 30% A	Friable (2)	300 sq ft (O & M)
Δ BRMTL-6	Original Bldg. 2 Level 1, debris	TSI 50 - 60% C	Friable (2)	900 sq ft
Δ BRMTL 7	Original Bldg. 1 Level 1, south wall	Cement 2 - 3% C	Friable (1)	Included in BRMTL 2
BRMTL 8	Original Bldg. 3 Level 1, metal roof bracing	Cement 1 - 2% C	Non-Friable (3)	N/A
Δ BRMTL 9	Original Bldg. 2 Level 1, south wall	TSI 45 - 50% C	Friable (3)	45 lineal ft
Δ BRMTL 10	Original Bldg. 3 Level 1, 10 ft above- ground	TSI 45 - 50% C	Friable (2)	60 lineal ft
Δ BRMTL 11	Original Bldg. 3 Level 1, 10 ft above- ground	TSI 45 - 50% C	Friable (2)	20 lineal ft
BRMTL 12	Original Bldg. 3 Level 1, west wall	Pipe wrap (no asbestos detected)	Non-friable	N/A

Note: See attached key for symbol clarification

ASBESTOS SURVEY RESULTS
Location: PG Investments Property

Sample No.	Location	Type ACBM	Condition	Quantity
Δ BRMTL 13	Inside warehouse, along west wall	TSI 25 - 30% A	Friable (2)	**
BRMTL 14	Inside warehouse, along west wall	Pipe wrap (no asbestos detected)	Non-friable	N/A
BRMTL 15	Inside warehouse, along southwest wall	Suspect air cell TSI (no asbestos detected)	Non-friable	N/A
BRMTL 16	Inside warehouse, along southwest wall	Pipe wrap (no asbestos detected)	Non-friable	N/A
Δ BRMTL 17	Inside warehouse Level 2, center	TSI 45 - 50% C	Friable (2)	**
Δ BRMTL 18	Inside warehouse Level 3, east corner	TSI 30 - 35% A	Non-friable (3)	**
BRMTL 19	Inside warehouse Level 3, east corner	Cement 2 - 3% C	Friable (1)	N/A (O & M)
BRMTL 20	Inside warehouse Level 1, office, south side	VA tile (12 inch) Mastic only 2 - 4% C	Non-friable (5)	N/A (O & M)
Δ BRMTL 21	Outside, debris pile	Transite pipe 10 - 15% C	Non-friable (4)	2 cu ft
Δ BRMTL 22	Outside, adjacent to store room, south end, containerized	TSI 45 - 50% C	Friable (2)	100 cu ft
BRMTL 23	Outside, adjacent to warehouse vat	TSI 2 - 4% C	Non-friable (3)	N/A (O & M)
BRMTL 24	Outside, south end of Branch Metals warehouse	Asbestos pipe debris 10 - 15% C	Non-friable (4)	N/A (O & M)
* BRMTL 25	Inside Branch Metals 55-gallon drum	Cement (no asbestos detected)	Friable (1)	N/A

Note: See attached key for symbol clarification

ASBESTOS SURVEY RESULTS

Key

- * - Sampled by client.
- ** - Cumulative quantity of approximately 600 lineal feet.
- Δ - Abatement planned.
- ⊗ - Abatement completed.
- O & M - Operations and maintenance program.
- N/A - No abatement required.
- TSI - Thermal systems insulation

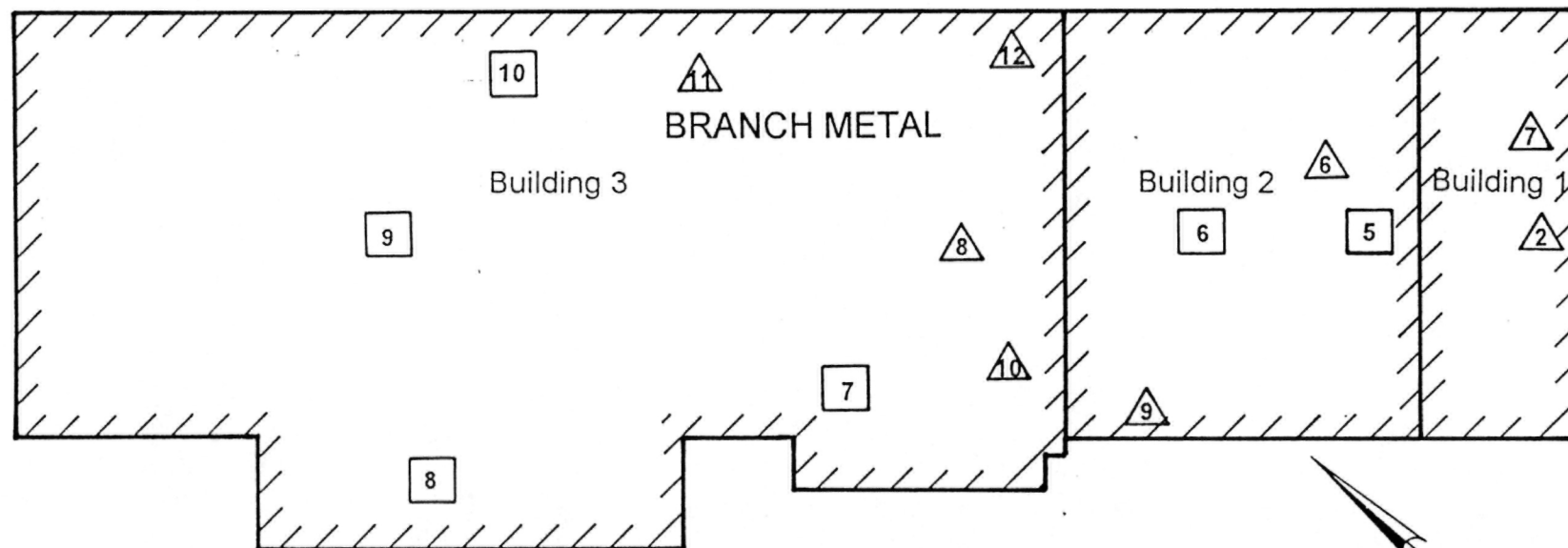
- a. Samples taken within the Branch Metals building are noted in bold-face print.
- b. All quantities are approximate.

Condition (Assessment)

- 1 = Significantly damaged/friable
- 2 = Damaged/friable
- 3 = Potentially significantly damaged/non-friable
- 4 = Damaged/non-friable
- 5 = Good condition/non-friable

Types of Asbestos

- C = Chrysotile
- CR = Crocidolite
- A = Amosite



NOTES

1. Plan adapted from a drawing dated July 29, 1964, titled "Plot Plan", prepared by The Austin Company, supplied by the client.
2. Sample locations were established in the field with reference to existing site features and are shown approximate only.

LEGEND



Air Sample Location and Identifier



Asbestos Sample Location and Identifier

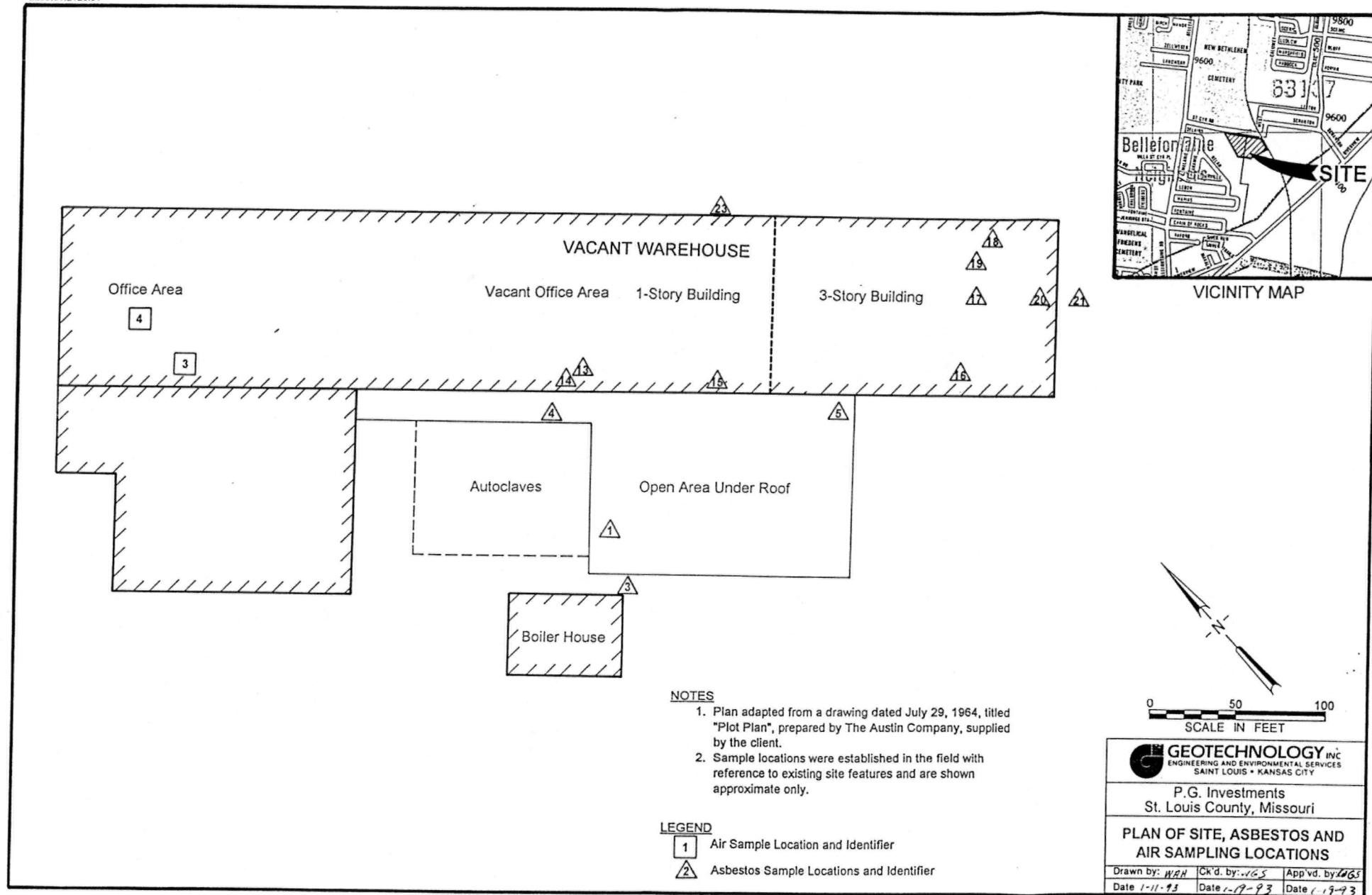


GEOTECHNOLOGY INC
ENGINEERING AND ENVIRONMENTAL SERVICES
SAINT LOUIS • KANSAS CITY

P.G. Investments
St. Louis County, Missouri

**PLAN OF SITE, ASBESTOS AND
AIR SAMPLING LOCATIONS**

Drawn by: WAH	Ck'd. by: <i>WHS</i>	App'vd. by: <i>WHS</i>
Date 1-11-93	Date 1-19-93	Date 1-19-93



APPENDIX A

ANALYTICAL RESULTS

Bulk Sampling
Health and Safety Air Sampling
Abatement Air Monitoring

Microscopic Analysis, Inc.

941 GARDENVIEW OFFICE PARKWAY
ST. LOUIS, MISSOURI 63141
(314) 993-2212

December 10, 1992

Mr. Gary Simmons
Geotechnology, Inc.
2258 Grissom Drive
St. Louis, Missouri 63146

Dear Mr. Simmons:

The bulk samples received on December 9, 1992, have been analyzed for asbestos content by Polarized Light Microscope (PLM) and Dispersion Staining (DS) EPA-600/M4-82-020 Method. The results of our analysis applies only to the samples submitted. Quantification was by visual estimation, and the results must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The laboratory results of these samples are contained below.

LABORATORY NUMBER	SAMPLE I.D./ LOCATION	RESULTS	PERCENT ASBESTOS
B-922306	BRMTL No. 1 Sample of lt. gray transite	Chrysotile Crocidolite	5-10% 3-5%
B-922307	BRMTL No. 2 Sample of brown hard chunks & powdery fi- brous material	Chrysotile Crocidolite Amosite	3-5% 1-2% 1-2%
B-922308	BRMTL No. 3 (Ext. boiler) Sample of white fi- brous material	Amosite	20-25%
B-922309	BRMTL No. 4 Piping Sample of lt. gray fibrous material	Chrysotile Amosite	5-10% 2-3%
B-922310	BRMTL No. 5 Trans - insul. Sample of off white fibrous material	Amosite	25-30%



Douglas N. Nimmo, CIH
Director

Microscopic Analysis, Inc.

941 GARDENVIEW OFFICE PARKWAY
ST. LOUIS, MISSOURI 63141
(314) 993-2212

December 22, 1992

Mr. Gary Simmons
Geotechnology, Inc.
2258 Grissom Drive
St. Louis, Missouri 63146

Dear Mr. Simmons:

The bulk samples received on December 18, 1992, have been analyzed for asbestos content by Polarized Light Microscope (PLM) and Dispersion Staining (DS) EPA-600/M4-82-020 Method. The results of our analysis applies only to the samples submitted. Quantification was by visual estimation, and the results must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The laboratory results of these samples are attached.

Please feel free to call if you have any questions regarding the results of these samples.

Sincerely,



Douglas N. Nimmo, CIH
Director

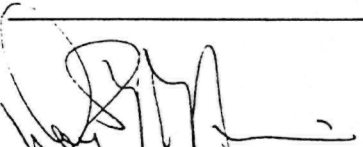
DNN/jn

Microscopic Analysis, Inc.

941 GARDENVIEW OFFICE PARKWAY
ST. LOUIS, MISSOURI 63141
(314) 993-2212

Page 2 of 4
Gary Simmons
December 22, 1992

LABORATORY NUMBER	SAMPLE I.D./ LOCATION	RESULTS	PERCENT ASBESTOS
B-922351	BRMTL-6 TSI Sample of white fi- brous material	Chrysotile	50-60%
B-922352	BRMTL-7 Suspect cement w/ACM lower level Sample of brown chunks & powdery fibrous ma- terial	Chrysotile	2-3%
B-922353	BRMTL-8 Suspect ACM (cement) Sample of brown chunks & powdery fibrous ma- terial	Chrysotile	1-2%
B-922354	BRMTL-9 TSI south side bldg. w.n. Sample of lt. tan fi- brous material	Chrysotile	45-50%
B-922355	BRMTL-10 TSI elbow Sample of white fi- brous material	Chrysotile	45-50%
B-922356	BRMTL-11 TSI pipe run Sample of white fi- brous material	Chrysotile	45-50%
B-922357	BRMTL-12 Pipe wrap Sample of off white cloth	No Asbestos Detected	N.A.

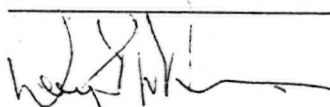

Douglas N. Nimmo, CIH
Director

Microscopic Analysis, Inc.

941 GARDENVIEW OFFICE PARKWAY
ST. LOUIS, MISSOURI 63141
(314) 993-2212

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Gary Simmons
December 22, 1992

LABORATORY NUMBER	SAMPLE I.D./ LOCATION	RESULTS	PERCENT ASBESTOS
B-922358	BRMTL-13 Heater insul. Sample of white fi- brous material	Amosite	25-30%
B-922359	BRMTL-14 Pipe wrap adj. to heater on Fl. Sample of lt. brown fibrous material	No Asbestos Detected	N.A.
B-922360	BRMTL-15 Susp. aircell Sample of brown paper material	No Asbestos Detected	N.A.
B-922361	BRMTL-16 Pipe wrap over fi- berglass Sample of gray cloth	No Asbestos Detected	N.A.
B-922362	BRMTL-17 TSI - pipe (vert.) center level 2 Sample of white fi- brous material	Chrysotile	45-50%
B-922363	BRMTL-18 TSI w/wrap 3rd level Sample of brown cloth with lt. gray fibrous material	Amosite in gray fibrous material	30-35%
B-922364	BRMTL-19 Sus CEM floor/adj. to VAT 3rd level Sample of lt. gray fi- brous material	Chrysotile	2-3%

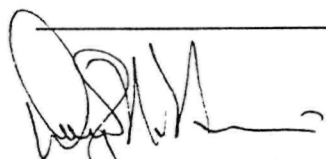

Douglas N. Nimmo, CIH
Director

Microscopic Analysis, Inc.

941 GARDENVIEW OFFICE PARKWAY
ST. LOUIS, MISSOURI 63141
(314) 993-2212

Page 4 of 4
Gary Simmons
December 22, 1992

LABORATORY NUMBER	SAMPLE I.D./ LOCATION	RESULTS	PERCENT ASBESTOS
B-922365	BRMTL-20 Sus. VAT (12" X 12") lev. 1 Sample of lt. tan tile & tan mastic	Chrysotile in mastic No Asbestos Detected in tile	2-4% N.A.
B-922366	BRMTL-21 Sample of lt. gray transite	Chrysotile	10-15%
B-922367	BRMTL-22 TSI - (removed outside) Sample of white fibrous material	Chrysotile	45-50%
B-922368	BRMTL-23 CMTC/outside VAT Sample of tan hard fi- brous material	Chrysotile	2-4%
B-922369	BRMTL-24 Sus ASB pipe Sample of gray transite	Chrysotile	10-15%



Douglas N. Nimmo, CIH
Director

Microscopic Analysis, Inc.

941 GARDENVIEW OFFICE PARKWAY
ST. LOUIS, MISSOURI 63141
(314) 993-2212

January 4, 1993



Mr. Gary Simmons
Geotechnology, Inc.
2258 Grissom Drive
St. Louis, Missouri 63146

Dear Mr. Simmons:

The bulk sample received on January 4, 1993, has been analyzed for asbestos content by Polarized Light Microscope (PLM) and Dispersion Staining (DS) EPA-600/M4-82-020 Method. The results of our analysis applies only to the sample submitted. Quantification was by visual estimation, and the results must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. The laboratory results of this sample is contained below.

LABORATORY NUMBER	SAMPLE I.D./ LOCATION	RESULTS	PERCENT ASBESTOS
B-932375	BRMTL 25 cement - sus. ACM Sample of brown powdery soil	No Asbestos Detected	N.A.

Douglas N. Nimmo, CIH
Director

ATC ENVIRONMENTAL INC.

CLIENT: Geotechnology Inc.
PROJECT NAME: Branch Metal
PROJECT NUMBER: 8527.2
PROJECT LOCATION: 620 St. Cyr Road
St. Louis, Missouri 63137

TECHNICIAN: Craig Johnson
SAMPLE DATE: 12/03/92
ANALYST: Craig Johnson

Effective Collection Area = 387.1 mm2
F.A. = 0.00785 mm2
NIOSH Method 7400

SAMPLE NUMBER	ANALYSIS DATE	PUMP NUMBER	SAMPLE DESCRIPTION	ACTIVITY	TIME ON/OFF	TOTAL MINUTES	FLOW RATE	TOTAL VOLUME	TOTAL FIBERS	FIELDS COUNTED	LOQ	F/CC
8527.2	-1	12/04/92	Field Blank									
												FIELD TEST = 2 FIBERS
8527.2	-2	12/04/92	Field Blank									
												FIELD TEST = 2 FIBERS
8527.2	-3	12/04/92	776 West Wall North End of Mechanic Shop	Ambient	16 : 4 30 : 23	859	2.5	2147.5	3.0	100	0.0023	< LOQ
8527.2	-4	12/04/92	4388 North End of Mechanic Shop Outside Office Door	Ambient								POWER FAILURE
8527.2	-5	12/04/92	4392 South End of South Recycle Warehouse	Ambient	16 : 15 30 : 46	871	2.5	2177.5	9.0	100	0.0023	< LOQ
8527.2	-6	12/04/92	4292 Center of South Recycle Warehouse	Ambient	16 : 18 30 : 49	871	2.5	2177.5	11.0	100	0.0023	0.0025
8527.2	-7	12/04/92	2352 Southwest Corner of North Recycle Warehouse	Ambient	16 : 25 30 : 34	849	2.5	2122.5	2.5	100	0.0023	< LOQ
8527.2	-8	12/04/92	807 West Wall of North Recycle Warehouse	Ambient	16 : 29 30 : 36	847	2.5	2117.5	5.0	100	0.0023	< LOQ
8527.2	-9	12/04/92	3155 West Wall of Office in North Recycle Warehouse	Ambient	16 : 31 30 : 39	848	2.5	2120.0	6.0	100	0.0023	< LOQ
8527.2	-10	12/04/92	3164 Northeast Corner of North Recycle Warehouse	Ambient	16 : 35 30 : 42	847	2.5	2117.5	3.0	100	0.0023	< LOQ

Technician:

Craig Johnson

Analyst:

Craig Johnson

Reviewed by:

Greg Chambliss, Branch Manager
St. Louis Regional Office

ATC ENVIRONMENTAL INC.

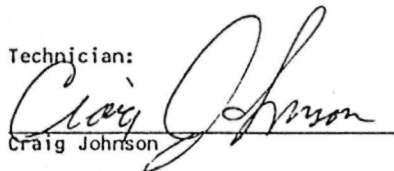
CLIENT: Geotechnology Inc.
PROJECT NAME: Branch Metals
PROJECT NUMBER: 8527.2
PROJECT LOCATION: 620 St. Cyr Road
St. Louis, Missouri 63137

TECHNICIAN: Craig Johnson
SAMPLE DATE: 12/03/92
ANALYST: Craig Johnson

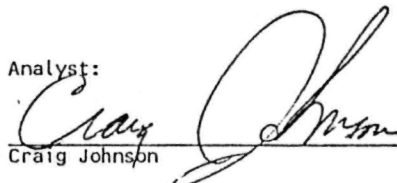
Effective Collection Area = 387.1 mm²
F.A. = 0.00785 mm²
NIOSH Method 7400

SAMPLE NUMBER	ANALYSIS DATE	PUMP NUMBER	SAMPLE DESCRIPTION	ACTIVITY	TIME ON/OFF	TOTAL MINUTES	FLOW RATE	TOTAL VOLUME	TOTAL FIBERS	FIELDS COUNTED	LOQ	F/CC
8527.2	12/04/92		Blind Recount of Sample Number 8						6.0	100		

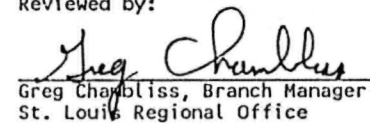
Technician:


Craig Johnson

Analyst:


Craig Johnson

Reviewed by:


Greg Chambliss, Branch Manager
St. Louis Regional Office



Centurion
Analytical
Laboratory

CENTURION ANALYTICAL LABORATORY

Page 1 of 1

AIRBORNE ASBESTOS ANALYSIS REPORT

Client: Environmental Control &
Abatement, Inc.

Date Received: 12-17-92

Client Project No.: 92089

Date Reported: 12-17-92

Analytical Technique: NIOSH Method 7400 *

Lab No.	Sample No.	Sample Description	Volume Liters	LRQ ** f/cc	Result f/cc
PG Investments					
C11725	121592-1	Personal Date: 12-15-92 T. Sherman South Bldg. Ramp Area 8 hour TWA = < 0.008	750	0.006	< 0.006
C11726	121592-2	Excursion Date: 12-15-92 T. Sherman South Bldg. Ramp Area	75	0.064	< 0.064
C11727	121592-3	Outside Area Date 12-15-92 South Bldg. Ramp Area	825	0.006	< 0.006

Comments: _____

* This method is not specific for asbestos.

** Lower limit of reliable quantification, based on minimum 0.1 fibers/field.

OVERLOAD DESCRIPTIONS

OL-FP ~ Overload fibrous particulate
OL-NFP ~ Overload non-fibrous particulate
OL-MIXED ~ Overload mixed fibrous and non-fibrous particulate

Laura Mitchell

Laura Mitchell
Laboratory Supervisor

AIHA Proficiency Analytical Testing Program #63043-001

11905 BORMAN DRIVE ST. LOUIS, MISSOURI 63146 (314) 569-3204 FAX (314) 569-0051

APPENDIX B

NESHAPS NOTIFICATION
*ABATEMENT COMPANY QUALIFICATIONS

*Will be submitted by ECA

ASBESTOS NESHAP (40 CFR PART 61)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #		
I. TYPE OF NOTIFICATION (O-Original R-Revised C-Canceled): X REVISED					
II. FACILITY INFORMATION (Identify Owner, Removal Contractor, and other operator)					
OWNER NAME: PG INVESTMENTS					
Address: 620 ST CYR ROAD					
City: ST LOUIS		State: MO	Zip: 63137		
Contact: PHILIP KOOTMAN		Tel: 314/867-7500			
REMOVAL CONTRACTOR: Environmental Control & Abatement, Inc. MO DNR #87-7-0062, IL EPA #0039					
Address: PO Box 2038 (413 Fee Fee Road)					
City: Maryland Heights		State: MO	Zip: 63043		
Contact: Jim Conkling, on-site supervisor Beeper #871-4029		Tel: 291-3440 Office			
OTHER OPERATOR:					
Address:					
City:		State:	Zip:		
Contact:		Tel:			
III. TYPE OF OPERATION (D-Demo O-Ordered Demo R-Renovation E-Emer.Renovation): R					
IV. IS ASBESTOS PRESENT? (Yes/No): Y					
V. FACILITY DESCRIPTION: (Include building name, number and floor or room number)					
Bldg Name: BRANCH METALS ABANDONED WAREHOUSE					
Address: 620 ST CYR ROAD					
City: St. Louis		State: MO	County: St Louis		
Site Location: ABANDONED WAREHOUSE					
Building Size: 200 sq ft		# of Floors: 1	Age in Years: APPROX 30		
Present Use: ABANDONED WAREHOUSE			Prior Use: WAREHOUSE		
VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Replicate samples of suspect building materials bulk sampling analysis.					
VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING:	RACH To Be Removed	Nonfriable Asbestos Material Not to Be Removed		Indicate Unit of Measurement Below	
1. Regulated ACM to be Removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed		Cat I	Cat II	Unit	
Pipes	88			Ln Ft: X	Ln M:
Surface Area				Sq Ft:	Sq M:
Vol RACH Off Facility Component				Cu Ft:	Cu M:
VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 12/15/92 7AM Complete: 12/15/92 3:30 12/15/92					
IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:					

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
CLEAN UP AND REMOVAL OF VALVES, PIPES AND HEADER STATION.

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE: Mini containment, full asbestos removal procedures, engineering controls, negative air, decontamination, total personal protective equipment, air monitoring. See attached.

XII. WASTE TRANSPORTER #1:

Name: Container Services EPA ID #405183

Address: 63 South Laclede Station Road

City: St. Louis

State: MO

Zip: 63119

Contact Person: Don or Leroy McFay *Mike Burch*

Tel: *961-700*

WASTE TRANSPORTER #2

Name:

Address:

City:

State:

Zip:

Contact Person:

Tel:

XIII. WASTE DISPOSAL SITE

Name: ~~D & L Landfill~~ *Litchfield Landfill* EPA ID# *135815007*

Location: East Route 16, PO Box 97

City: Litchfield

State: IL

Zip: 62056

Telephone: 217/324-2811

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name:

Title:

Authority:

Date of Order (MM/DD/YY):

Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and hour of Emergency (MM/DD/YY):

Description of the Sudden, Unexpected Event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURE TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLER, PULVERIZED, OR REDUCED TO POWDER. See XI above.

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS (Required 1 year after promulgation).

WMA Benueza 12/14/92
(Signature of Owner/Operator) (Date)

XVIII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

WMA Benueza 12/14/92
(Signature of Owner/Operator) (Date)




APPENDIX C

LIMITATIONS OF REPORT

ASBESTOS SURVEY LIMITATIONS OF REPORT

1. This report has been prepared on behalf of and for the exclusive use of the addressee, solely for use in an asbestos survey of the site. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of Geotechnology. However, Geotechnology acknowledges and agrees that the report may be conveyed to the lending institution or prospective buyers associated with the sale of the property. We recommend that Geotechnology be consulted prior to any demolition or renovation which might disturb asbestos.
2. This asbestos survey was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and Geotechnology observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. The findings and conclusions stated herein are limited to the areas surveyed and are our professional opinion concerning the significance of the limited data gathered during the course of the asbestos survey. No other warranty, express or implied, is made. Specifically, Geotechnology does not and cannot represent that the site contains no hazardous waste or material, oil (including petroleum products), or other latent condition beyond that observed by Geotechnology during the asbestos survey. In addition, there may exist additional asbestos which was not a part of the expressed scope of work or was inaccessible.
3. The observations described in this Report were made under the conditions stated therein. The conclusions presented in the Report were based solely upon the services described therein, and not on scientific tasks or procedure beyond the scope of described services or the time and budgetary constraints imposed by Client. Furthermore, such conclusions are based solely on materials sampled and analyzed, and rules and regulations which were in effect, at the time of the study. The work described in this report was carried out in accordance with the Terms for Geotechnology's Services which accompanied the proposal.
- *4. In preparing this Report, Geotechnology has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to Geotechnology at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, an attempt to independently verify the accuracy of completeness of all information reviewed or received during the course of this site assessment was not made.
- *5. In the event that information is developed relative to environmental or hazardous waste or material issues at the site and not contained in this report, such information shall be brought to Geotechnology's attention. Geotechnology will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this Report.

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6. Observations were made of the site and of structures on the site as indicated within the Report. Where access to portions of the site or to structures on the site was unavailable or limited, Geotechnology renders no opinion as to the presence of asbestos, hazardous waste or material, oil or other petroleum products, or to the presence of indirect evidence relating to asbestos, hazardous waste or material or oil, or other petroleum products in that portion of the site or structure. In addition, Geotechnology renders no opinion as to the presence of asbestos, hazardous waste or material, oil or other petroleum products or to the presence of indirect evidence relating to asbestos, hazardous material, oil, or petroleum products where direct observation of the interior walls, floor, roof, or ceiling of a structure on a site was obstructed by objects or coverings on or over these surfaces.
 7. Unless otherwise specified in the Report, Geotechnology did not perform testing or analyses to determine the presence of concentration of asbestos, radon, formaldehyde, or polychlorinated biphenyls (PCB's) at the site or in the environment at the site.
 - *8. The purpose of this Report was to assess the physical characteristics of the subject site with respect to the presence in the environment of hazardous waste or material, oil, or petroleum products, as defined in Federal CFR Parts 261, 280-281, 302, 355, and 49 CFR Part 172. No specific attempt was made to check on the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.
 9. It is recommended that Geotechnology be retained to provide further engineering services during construction and/or implementation of any remedial measures recommended in this report. This is to allow Geotechnology to observe compliance with the regulations, concepts and recommendations contained herein, and to allow the development of design changes in the event that surface or subsurface conditions differ from those anticipated.

* Applicable only to a Phase I Environmental Site Assessment

APPENDIX D

Geotechnology, Inc. Proposal No. 2293.01.2120

Geotechnology, Inc. Proposal No. 2293.02.2120

PROPOSAL

ASBESTOS CONSULTING SERVICES
PG INVESTMENT PROPERTY
ST. LOUIS, MISSOURI

Prepared For:

PG INVESTMENTS
St. Louis, Missouri

Prepared By:

GEOTECHNOLOGY, INC.
St. Louis, Missouri

December 10, 1992

2293.01.2120
Revised

PROPE\229301.PRO



GEOTECHNOLOGY INC.
ENGINEERING AND ENVIRONMENTAL SERVICES
SAINT LOUIS • KANSAS CITY • CHICAGO

December 10, 1992

2293.01.2120
Revised

Mr. Phil Kootman
PG Investments
620 St. Cyr Road
St. Louis, Missouri 63137

Subject: Proposal to Provide Asbestos Consulting Services
PG Investment Property
St. Louis, Missouri

Dear Mr Kootman:

Geotechnology, Inc. is pleased to provide you with this proposal to provide asbestos consulting services at the Branch Metal facility and selected areas of the PG Investment Property. This proposal consists of our understanding of the project, purpose for the proposed scope of services, a brief site description, schedule and basis of compensation, and other general terms and conditions.

SITE DESCRIPTION AND PROJECT PURPOSE

Branch Metal, a metals recycling business, currently occupies approximately 60,000 square feet of the near 110,000 square foot facility located at 620 St. Cyr Road, in St. Louis County. The building has been occupied by Branch Metals for approximately the past twelve years. The structure is located on a 36-acre tract which is owned by PG Investments. Branch Metal leases their space from PG Investments. An additional 100,000 square foot plus vacant warehouse is adjacent to Branch Metal.

Pursuant to our recent meeting of November 27, 1992, and subsequent walk-over of the property, the primary purpose of this scope of work is to assess for the presence of asbestos-containing building materials (ACBM) in the space currently occupied by Branch Metal. This will include suspect bulk material identification and ambient air monitoring. In addition, several samples of suspect ACBM will be taken from the boiler room of the adjacent property. Finally, asbestos-containing debris and abandoned ACM piping is present adjacent to large warehouse. Arrangements with a qualified asbestos abatement contractor will be made for removal, transporting, and disposal.

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SCOPE OF WORK

- Review existing and available working drawings to note for usage of asbestos-containing building materials.
- Bulk sampling of approximately ten suspect asbestos-containing materials, noting material condition, and taking photographs.
- Submit samples to an accredited laboratory for analysis by polarized-light microscopy coupled with dispersion staining to identify presence of asbestos.
- Arrange and coordinate air monitoring at approximately six locations at predetermined locations within the Branch Metal facility. Perform air monitoring at two locations at the adjacent warehouse facility owned by PG Investments.
- Submit air monitoring samples to an accredited laboratory to perform phased contrast microscopy analysis.
- Review bulk and air sampling analysis results.
- Arrange for an asbestos abatement contractor to perform minor clean-up of asbestos-containing materials at several locations adjacent to the warehouse facility.
- Prepare a report documenting the results and giving general recommendations for asbestos encapsulation or removal along with additional personal health and safety recommendations, as required.

SCHEDULE & BASIS OF COMPENSATION

Geotechnology, Inc. is prepared to begin providing the aforementioned scope of services immediately, upon receiving your written acceptance of this proposal. We anticipate performing the sampling, obtaining analytical results, and finalizing a report within ten days of beginning the project. Verbal results will be given upon receiving the analytical results.

We propose to perform the scope of services on a time and materials basis. We estimate the field, bulk sample analysis and reporting services will be approximately Two Thousand Two Hundred Dollars (\$2,200.00). This estimate is based on taking 10 bulk and 6 air samples, respectively. Billing will be in accordance with the attached fee schedule. If the scope of work changes, affecting the proposed amount, we will notify you prior to performing additional work. Billing of the air monitoring and abatement services will be directly to PG Investments by the selected firms.

SITE ACCESS

By execution of this Agreement, PG Investments grants or agrees to obtain access to the site for all equipment and personnel necessary for Geotechnology to perform the aforementioned scope of services.

REPORT LIMITATIONS

Our report will consist of a review of the information collected as described in the scope of services, and will conclude with our professional opinion as to your environmental exposure relative to the presence of asbestos at the Branch Metal facility and PG Investment property, and give general recommendations to reduce any potential environmental exposure. Geotechnology will not be able to represent that the site contains additional hazardous materials, waste, petroleum product, or other latent condition beyond those observed by Geotechnology during the site assessment. We understand that you are interested in selling the property that is currently vacant. We would be pleased to address other existing environmental issues as required at the appropriate time.

Additional work and expertise beyond that given in the scope of work are required if the report is to be used for other purposes.

PG Investments
December 10, 1992
Page 4

2293.01.2120
Revised

Geotechnology appreciates the opportunity to serve you. If this proposal is acceptable to you, you may authorize us to proceed by signing on the space provided on Page 6 of the attached Terms for Geotechnology's Services and returning one signed copy for our files. If you issue a purchase order, please attach it to a copy of the Terms. We also request that clients new to Geotechnology complete and return the attached Client Project Data Sheet. Please contact Mr. Ron Eckelkamp, P.E., or me if you have any questions.

Very truly yours,

GEOTECHNOLOGY, INC.



W. Gary Simmons
Project Manager

WGS:wgs/tlp

Attachments: Fee Schedule
Terms for Geotechnology's Services

cc: Mr. Mike Kootman; Branch Metals

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FEE SCHEDULE

1. PROFESSIONAL SERVICES BY STAFF AND PRINCIPALS

Fees for services are based on the number of hours expended on project, including travel; by professional, technical, and clerical personnel. The fee will be computed by multiplying the number of hours worked by each class of personnel by the hourly rate listed below for that class or category:

<u>Personnel Classification</u>	<u>Hourly Rates**</u>
Principal, Operations Manager	\$95 - \$115
Associate, Program or Project Manager	\$80 - \$100
Principal Engineer/Scientist, Senior Project Engineer/Scientist	\$75 - \$85
Senior Engineer/Scientist, Project Engineer/Scientist	\$65 - \$75
Staff Engineer/Scientist	\$55 - \$65
Engineer/Scientist	\$45* - \$55*
Technician/Draftsperson	\$35* - \$40*
Word Processor	\$30* - \$35*

* For overtime work, rates will be 30 percent greater.

** For emergency service, expert witness, and litigation, rates will be 50 percent greater. Rates include cost of general health and safety training and monitoring for technical personnel.

2. REIMBURSABLE EXPENSES

Expenses other than salary costs that are directly attributable to our professional services are invoiced at our cost plus 15 percent. These expenses include subcontracts and such items as out of town travel expenses, long distance telephone charges, use of rental cars, job related supplies and instruments, special fees and permits, health and safety equipment, printing and reproduction, premiums for additional or special insurance where required, etc.

3. LABORATORY TESTING

Laboratory soil testing will be charged based on our standard unit prices or on a time and expense basis based on rates given in items 1 and 2 above. A copy of our standard unit prices for laboratory testing, if applicable, is available upon request. Analytical testing will be subcontracted to an EPA approved laboratory and will be charged based on Item 2 above.

4. EQUIPMENT

Charges for major owned equipment used on a project will be based on our standard unit rates for the equipment. A copy of our standard unit rates for the equipment is given on the reverse side of this schedule.

5. RATE ADJUSTMENT

Rates given on this Fee Schedule are for work performed through the 1992 calendar year. For work performed in calendar year 1993, rates in effect for that year will apply.

EQUIPMENT AND SUPPLIES SCHEDULE
Drill Rig, Support Vehicles, and Equipment
Rates and Charges

1. Drilling Equipment (w/2-Man Crew)*

<u>Item</u>	<u>Unit Rate</u>
Mobil B-24	125.00/hr
CME 55, 75, 550, 750	135.00/hr
Schramm T-64 Air Rotary	180.00/hr
Additional Crew Laborer	35.00/hr

2. Support Vehicles

<u>Item</u>	<u>Unit Rate</u>
Water Truck	100.00/day
4-Wheel Drive Water Truck	150.00/day
Boom Truck	150.00/day
Box Truck	100.00/day
Vehicle for Field Monitoring	0.50/mile
Minimum Charges:	
4-Wheel Drive Vehicles and Vans	40.00/day

3. Drilling Support Equipment

<u>Item</u>	<u>Unit Rate</u>
Generator	50.00/day
Steam Cleaner	100.00/day
Centrifugal Pump	25.00/day
Cement Mixer	50.00/day
Submersible Pump and Generator	125.00/day
Welder	25.00/day
Grout Plant	100.00/day
Air Compressor	100.00/day
Concrete Coring Machine	100.00/day
6-1/4 inch or 8-1/4 inch Hollow Stem Augers	200.00/day

4. Monitoring/Testing Equipment

<u>Item</u>	<u>Unit Rate</u>
MMC Oil-Water Interface Probe	35.00/day
Draeger Multi-Warn (O ₂ , CO, LEL)	40.00/day
Explosimeter	25.00/day
Photo Tip I PID OVA	50.00/day
Photo Tip II PID OVA	60.00/day
Micro Tip PID OVA	70.00/day
Gossen GEOHM-3 Resistivity Mtr	50.00/day
Bison 2-Channel Refraction Seismograph	50.00/day
Photovac 10S50 Portable G.C.	200.00/day
Hermit Data Logger and Software	80.00/day

4. Monitoring/Testing Equipment (continued)

<u>Item</u>	<u>Unit Rate</u>
Cellular Phone	10.00/day
Temperature Probe	10.00/day
Zenith Portable Computer	50.00/day
Portable Fume Hood	50.00/day
Walkie-Talkies (Non-explosion proof)	20.00/day
Metal Detector	
Single Antenna	25.00/day
Metal Detector	
Send and Receive	50.00/day
Nuclear Gauge for Fill Control	40.00/day
PH Probe	10.00/day
Dissolved Oxygen Meter	10.00/day
Water Level Indicator	15.00/day
Precise Survey and Level	100.00/day

5. Protective Equipment

<u>Item</u>	<u>Unit Rate</u>
Level A Protective Equip.	250.00/day/man ^b
Level B Protective Equip.	150.00/day/man ^b
Level C Protective Equip.	
Tyvek	80.00/day/man
Level C Protective Equip.	
Saranex	105.00/day/man
Level D Protective Equip.	
Gloves, Cotton	20.00/day/man
Gloves, Latex	1.00/pair
Gloves, Solvex	5.00/pair
Boot Replacement	3.50/pair
Duct Tape	Cost + 25% 5.00/roll

6. Supplies

<u>Item</u>	<u>Unit Rate</u>
Sample Containers	
40 ml VOA	2.50/each
125 ml	3.00/each
250 ml	4.00/each
500 ml	4.25/each
950 ml	7.50/each
Sample Coolers	
I-Chem	12.00/each
Small Playmate	5.00/day
Large Coleman	10.00/day
Sample Collection Devices	
Bailers - Plastic Disposable	7.00/day
Bailers - PVC	2.00/day
Bailers - Stainless	5.00/day
Coliwasa - Plastic	2.00/day
Coliwasa - Glass	5.00/day
Coliwasa - Teflon	5.00/day
Drum Thief - Glass	1.00/day

7. Remediation Equipment

<u>Item</u>	<u>Unit Rate</u>
Carbon Filter Unit	0.40/gallon (500/day minimum)

* Overtime premium, add \$15.00 per hour, per man.

^b Plus mobilization and health and safety support personnel.

TERMS FOR GEOTECHNOLOGY'S SERVICES

1 - THE AGREEMENT

- a. This AGREEMENT is made by and between: Geotechnology, Inc., hereinafter referred to as GEOTECHNOLOGY, and PG Investments hereinafter referred to as CLIENT.
- b. The AGREEMENT between the parties consists of these TERMS, the attached PROPOSAL identified as Proposal No. 2293.01.2120 Revised, dated December 10, 1992, and any exhibits or attachments noted in the PROPOSAL. Together, these elements will constitute the entire AGREEMENT superseding any and all prior negotiations, correspondence, or agreements either written or oral. Any changes to this AGREEMENT must be mutually agreed to in writing.

2 - STANDARD OF CARE

- a. CLIENT recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by GEOTECHNOLOGY will be based solely on information available to GEOTECHNOLOGY. GEOTECHNOLOGY is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.
- b. Services performed by GEOTECHNOLOGY under this AGREEMENT are expected by CLIENT to be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the geotechnical and environmental services profession practicing contemporaneously under similar conditions in the locality of the project. Under no circumstance is any warranty, expressed or implied, made in connection with the providing of our services.

3 - SITE ACCESS AND SITE CONDITIONS

- a. CLIENT will grant or obtain free access to the site for all equipment and personnel necessary for GEOTECHNOLOGY to perform the work set forth in this AGREEMENT. CLIENT will notify any and all possessors of the project site that CLIENT has granted GEOTECHNOLOGY free access to the site. GEOTECHNOLOGY will take reasonable precautions to minimize damage to the site, but it is understood by CLIENT that, in the normal course of work, some damage may occur and the correction of such damage is not part of this AGREEMENT unless so specified in the PROPOSAL.
- b. Unless indicated otherwise in the PROPOSAL, CLIENT is responsible for accurately delineating the locations of all subterranean structures and utilities. GEOTECHNOLOGY will take reasonable precautions to avoid known subterranean structures, and CLIENT waives any claim against GEOTECHNOLOGY, and agrees to defend, indemnify, and hold GEOTECHNOLOGY harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, CLIENT agrees to compensate GEOTECHNOLOGY for any time spent or expenses incurred by GEOTECHNOLOGY in defense of any such claim, with compensation to be based upon GEOTECHNOLOGY's prevailing fee schedule and expense reimbursement policy.

4 - SAMPLE DISPOSAL

- a. GEOTECHNOLOGY will dispose of all remaining soil and rock samples sixty (60) days after submission of the report covering those samples. Further storage or transfer of samples can be made at CLIENT's expense upon CLIENT's prior written request.

5 - MONITORING

- a. If GEOTECHNOLOGY is retained by CLIENT to provide a site representative for the purpose of monitoring specific portions of construction work or other field activities as set forth in the PROPOSAL, then this paragraph applies. For the specified assignment, GEOTECHNOLOGY will report observations and professional opinions to CLIENT. No action of GEOTECHNOLOGY's site representative can be construed as altering any AGREEMENT between CLIENT and others. GEOTECHNOLOGY will report to CLIENT any observed conditions related to services for which GEOTECHNOLOGY has been retained to perform which, in GEOTECHNOLOGY's professional opinion, does not conform with plans and specifications. GEOTECHNOLOGY has no right to reject or stop work of any agent of the CLIENT. Such rights are reserved solely for CLIENT. Furthermore, GEOTECHNOLOGY's presence on site does not in any way guarantee the completion or quality of the performance of the work of any party retained by CLIENT to provide field or construction-related services.
- b. Unless indicated otherwise in the PROPOSAL, GEOTECHNOLOGY will not be responsible for and will not have control or charge of specific means, methods, techniques, sequences or procedures of construction or other field activities selected by any agent or agreement of CLIENT, or safety precautions and programs incident thereto.

6 - BILLING AND PAYMENT

- a. CLIENT will pay GEOTECHNOLOGY in accordance with the procedures indicated in the PROPOSAL and its attachments. Invoices will be submitted to CLIENT by GEOTECHNOLOGY, and will be due and payable upon presentation. If CLIENT objects to all or any portion of any invoice, CLIENT will so notify GEOTECHNOLOGY in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. The absence of written notification described above, shall constitute an unqualified acceptance of the invoice amount due and payable, and waiver by CLIENT of all claims with respect thereto.
- b. Invoices are delinquent if payment has not been received within thirty (30) days from date of invoice. CLIENT will pay an additional charge of one-and-one-half (1.5) percent per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent amount, excepting any portion of the invoiced amount in dispute and resolved in favor of CLIENT. Payment thereafter will first be applied to accrued interest and then to the principal unpaid amount. All time spent and expenses incurred (including any attorney's fees and/or collection fees) in connection with collection of any delinquent amount will be paid by CLIENT to GEOTECHNOLOGY per GEOTECHNOLOGY's current fee schedules. In the event CLIENT fails to pay GEOTECHNOLOGY within sixty (60) days after invoices are rendered, CLIENT agrees that GEOTECHNOLOGY will have the right to consider the failure to pay GEOTECHNOLOGY's invoice as a breach of this AGREEMENT.

7 - TERMINATION

- a. This AGREEMENT may be terminated by either party seven (7) days after written notice in the event of any breach of any provision of this AGREEMENT or in the event of substantial failure of performance by the other party, or if CLIENT suspends the work for more than three (3) months. In the event of termination, GEOTECHNOLOGY will be paid for services performed prior to the date of termination plus reasonable termination expenses, including, but not limited to the cost of completing analyses, records, and reports necessary to document job status at the time of termination.

8 - RISK ALLOCATION - PROFESSIONAL LIABILITY

The provisions of this section apply to professional liability and not general liability.

8 - RISK ALLOCATION - PROFESSIONAL LIABILITY (Cont'd.)

- a. Many risks potentially affect GEOTECHNOLOGY by virtue of entering into this AGREEMENT to perform its services on behalf of CLIENT. The principal risk is the potential for human error by GEOTECHNOLOGY. For CLIENT to obtain the benefit of a fee which includes a nominal allowance for dealing with GEOTECHNOLOGY's liability, CLIENT agrees to limit GEOTECHNOLOGY's liability to CLIENT and to all other parties for claims arising out of GEOTECHNOLOGY's performance of the services described in this AGREEMENT. The aggregate liability of GEOTECHNOLOGY will not exceed The Fee for negligent professional acts, errors, or omissions, and CLIENT agrees to indemnify and hold harmless GEOTECHNOLOGY from and against all liabilities in excess of the monetary limit established above. In the event that you are unwilling or unable to limit our professional liability to the above referenced sum, we will waive this limitation upon written request at the time of acceptance of this agreement; provided that you agree to pay for this waiver an additional consideration of four percent (4%) of our total fee, or \$500, whichever is greater.
- b. Limitations on liability and indemnities in this AGREEMENT are business understandings between the parties voluntarily and knowingly entered into, and shall apply to all theories of recovery including, but not limited to, breach of contract, warranty, tort (including negligence), strict or statutory liability, or any other cause of action, except for willful misconduct or gross negligence. The parties also agree that CLIENT will not seek damages in excess of the limitations indirectly through suits with other parties who may join GEOTECHNOLOGY as a third-party defendant. Parties means CLIENT and GEOTECHNOLOGY and their officers, employees, agents, affiliates, and subcontractors.
- c. Both CLIENT and GEOTECHNOLOGY agree that they will not be liable to each other, under any circumstances, for special, indirect, consequential, or punitive damages arising out of or related to this AGREEMENT.

9 - DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS

- a. CLIENT represents that CLIENT has made a reasonable effort to evaluate if hazardous materials are on or near the project site, and that CLIENT has informed GEOTECHNOLOGY of CLIENT's findings relative to the possible presence of such materials.
- b. Hazardous materials may exist at a site where there is no reason to believe they could or should be present. GEOTECHNOLOGY and CLIENT agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. GEOTECHNOLOGY and CLIENT also agree that the discovery of unanticipated hazardous materials may make it necessary for GEOTECHNOLOGY to take immediate measures to protect health and safety. CLIENT agrees to compensate GEOTECHNOLOGY for measures taken to protect health and safety and/or any equipment decontamination or other costs incidental to the discovery of unanticipated hazardous materials.
- c. GEOTECHNOLOGY agrees to notify CLIENT when unanticipated hazardous materials or suspected hazardous materials are encountered. CLIENT agrees to make any disclosures required by law to the appropriate governing agencies. CLIENT also agrees to hold GEOTECHNOLOGY harmless for any and all consequences of disclosures made by GEOTECHNOLOGY which are required by governing law. In the event the project site is not owned by CLIENT, CLIENT recognizes that it is CLIENT's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.
- d. Notwithstanding any other provision of the AGREEMENT, CLIENT waives any claim against GEOTECHNOLOGY and, to the maximum extent permitted by law, agrees to defend, indemnify, and save GEOTECHNOLOGY harmless from any claim, liability, and/or defense costs for injury or loss arising from GEOTECHNOLOGY'S discovery of unanticipated hazardous materials or suspected hazardous materials, including, but not limited to, any costs created by delay of the project and any costs associated with possible reduction of the property's value.
- e. CLIENT will be responsible for ultimate disposal of any samples secured by GEOTECHNOLOGY which are found to be contaminated.

10 - DISPUTES RESOLUTION

- a. All claims, disputes, and other matters in controversy between GEOTECHNOLOGY and CLIENT arising out of or in any way related to this AGREEMENT will be submitted to "alternative dispute resolution" (ADR) before and as a condition precedent to other remedies provided by law. If and to the extent CLIENT and GEOTECHNOLOGY have agreed on methods for resolving such disputes, then such methods will be set forth in the "Alternative Dispute Resolution Agreement" which, if attached, is incorporated into and made a part of this AGREEMENT. If no specific ADR procedure is set forth in this AGREEMENT, then it shall be understood that the parties shall submit disputes to mediation as a condition precedent to litigation. Notwithstanding any other provision of the Agreement, GEOTECHNOLOGY shall have, in addition to any other right or option set forth herein, the right to proceed in creating a lien upon the building or other improvements and upon the real estate on which the building or improvements are situated for the work and labor done and the labor and materials furnished on and to said real estate and to enforce its mechanic's lien pursuant to all rights and remedies available to it under law.
- b. If a dispute at law arises from matters related to the services provided under this AGREEMENT and that dispute requires litigation instead of ADR as provided above, then:
 - (1) the claim will be brought and tried in judicial jurisdiction of the court of the county where GEOTECHNOLOGY's principal place of business is located and CLIENT waives the right to remove the action to any other county or judicial jurisdiction, and
 - (2) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, and other claim related expenses.

11 - GOVERNING LAW AND SURVIVAL

- a. The law of the State of Missouri will govern the validity of these TERMS, their interpretation and performance.
- b. If any of the provisions contained in this AGREEMENT are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Limitations of liability and indemnities will survive termination of this AGREEMENT for any cause.

12 - FUTURE SERVICES

- a. All future services including, but not limited to; review of plans and specifications, construction monitoring and post-construction work, rendered by GEOTECHNOLOGY at CLIENT'S request for the project described in the PROPOSAL shall be conducted under the terms of this agreement.

ADDITIONAL TERMS FOR ENVIRONMENTAL SERVICES

13 - ADDITIONAL TERMS

The following additional terms (Items 14 through 17) become operative for GEOTECHNOLOGY's services for Site Environmental Assessments and/or Contaminated Sites, when the site on or for which our services are provided is known or found to contain environmentally unsafe substances, such as, but not limited to, hazardous and/or toxic contaminants, or materials and wastes regulated under 40 and 49 Code of Federal Regulations.

14 - JOBSITE

- a. CLIENT shall furnish or cause to be furnished to GEOTECHNOLOGY all documents and information known to CLIENT that relate to the identity, location, quantity, nature or characteristics of any hazardous waste at, on or under the site. In addition, CLIENT will furnish or cause to be furnished such other reports, data, studies, plans, specifications, documents and other information on surface and subsurface site conditions required by GEOTECHNOLOGY for proper performance of its services. GEOTECHNOLOGY shall be entitled to rely upon the provided documents and information in performing the services required under this AGREEMENT; however, GEOTECHNOLOGY assumes no responsibility or liability for their accuracy or completeness. Documents provided by CLIENT will remain CLIENT'S property.
- b. Unless indicated otherwise in the PROPOSAL, the client will be responsible for the development of a site health and safety plan and for conducting health and safety meetings as prescribed by 29 CFR 1910.120.
- c. Unless indicated otherwise in the PROPOSAL, GEOTECHNOLOGY will not supervise or control the work of contractors or their subcontractors working under contract with others. GEOTECHNOLOGY's services will not include a review or evaluation of such contractor's (or subcontractor's) safety measures, or their compliance with the appropriate federal, state and local regulations.
- d. Unless indicated otherwise in the PROPOSAL, GEOTECHNOLOGY shall be responsible only for its activities and that of its employees on any site. Neither the professional activities nor the presence of GEOTECHNOLOGY or its employees or its subcontractors on a site shall imply that GEOTECHNOLOGY controls the operations of others, nor shall this be construed to be acceptance by GEOTECHNOLOGY of any responsibility for jobsite safety.

15 - DISPOSAL OF CONTAMINATED MATERIAL

- a. It is understood and agreed that GEOTECHNOLOGY is not, and has no responsibility as, a handler, generator, operator, treater or storer, transporter or disposer of hazardous or toxic substances found or identified at the site, and that CLIENT shall undertake or arrange for the handling, removal, treatment, storage, transportation and disposal of hazardous substances of constituents found or identified at the site.

16 - CONTAMINATED EQUIPMENT AND CONSUMABLES

- a. Any of GEOTECHNOLOGY's field or laboratory equipment that becomes contaminated by hazardous materials encountered at the project site must be decontaminated and contaminated consumables must be disposed of properly. CLIENT agrees to remunerate GEOTECHNOLOGY for costs associated with decontamination of equipment and disposal and replacement of contaminated consumables. In some instances, the fair market value of a piece of equipment, were it not contaminated, together with the cost of properly transporting and disposing of the equipment, may be less than the cost of decontamination. In such instances, GEOTECHNOLOGY shall notify CLIENT.
- b. CLIENT has the option of paying for decontamination, or purchasing the equipment at its fair market value immediately prior to contamination. If CLIENT elects to purchase equipment, CLIENT and GEOTECHNOLOGY shall enter into a specific agreement for that purpose. For purposes of this AGREEMENT, any equipment that cannot be decontaminated shall be considered a consumable.

17 - INDEMNIFICATION

To the fullest extent permitted by law, CLIENT shall indemnify, defend and hold harmless GEOTECHNOLOGY and its subcontractors, consultants, agents, officers, directors and employees from and against all claims, damages, losses and expenses, whether direct, indirect or consequential, including but not limited to fees and charges of attorneys and court and arbitration costs, arising out of or resulting from the services or work of GEOTECHNOLOGY, or any claims against GEOTECHNOLOGY arising out of, are related to, or are based upon, the actual or threatened dispersal, discharge, escape, release or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other material, irritant, contaminant or pollutant in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface of (a) soil, (b) water or water sources, (c) objects, or (d) any tangible or intangible matter, whether sudden or not. Such indemnification shall not apply to claims, damages, losses or expenses which are finally determined to result from willful or reckless disregard by GEOTECHNOLOGY of its obligations under this AGREEMENT.

18 - SIGNATURES

- a. The parties have read the foregoing, understand completely the terms, and willingly enter into this AGREEMENT which will become effective on the date signed below by CLIENT.

PG Investments

Geotechnology, Inc.

Michael Kootman for Phil Kootman M. Mike Alizadeh

By: Michael Kootman for Phil Kootman
(Type or Print Name)

By: M. Mike Alizadeh, P.E.

Pres of Branch Metal Co
Position

Position: President

12/11/92
Date

Date: December 10, 1992



GEOTECHNOLOGY INC.

ENGINEERING AND ENVIRONMENTAL SERVICES
SAINT LOUIS • KANSAS CITY • CHICAGO

2293.02.2120.01

December 28, 1992

Mr. Jerry Kootman
PG Investments
620 St. Cyr Road
St. Louis, Missouri 63137

Subject: Proposal to Provide Additional
Asbestos Consulting Services
St. Louis, Missouri

Dear Mr. Kootman:

Geotechnology, Inc. has been pleased to assist PG Investments thus far by providing asbestos consulting services. The purpose of this proposal is twofold. First we would like to inform you that the work as scoped in our original proposal (No. 2293.01.2120), dated December 10, 1992, has been completed, with the exception of the final report which is currently being developed. Secondly, additional work has been performed as requested by Mr. Phil Kootman and required to properly address the asbestos and regulatory issues you currently face. This proposal includes a summary of the work performed and recommendations for additional work, including the general scope of this work, the schedule, and the approximate cost.

SUMMARY OF WORKED PERFORMED

The following is a brief summary of worked performed to date under the original and expanded scope of services:

- a) Sampling of 24 suspect asbestos-containing building materials (ACBM)
- b) Polarized-light microscopy analytical analysis of bulk samples
- c) Air monitoring and phased contrast analysis of 8 samples
- d) Asbestos abatement contractor prequalification, specification of the scope of work for abatement, contractor negotiation/selection, award, and project visual and air monitoring clearance
- e) Observation of drilling of suspect asbestos cement pipe landfilled material and interface with the Environmental Protection Agency
- f) Walkthrough of the facility and observation of suspect ACBM with EPA officials
- g) Communication with attorney and owner as required



- h) Planning for additional asbestos abatement which includes interface with asbestos abatement contractors, regulatory agencies and owners
- i) Review of existing and available drawings

The above scope of work includes the original scope as outlined in our proposal of December 10, 1992, plus additional work required to accomplish the goal of the owner. This would include addressing environmental and regulatory concerns as they relate to the presence of asbestos-containing materials.

SUMMARY OF THE RESULTS

The following is a brief summary of the results of work performed to date:

- a) Asbestos identified in twenty of the twenty-four samples taken
- b) Air monitoring results below the action level for sampling performed in both warehouse facilities
- c) Condition and Hazard assessment of identified ACBM
- d) Successful abatement and final clearance of the two priority outside areas where asbestos was identified and in significantly bad condition or in the form of debris
- e) Preparation stages of abating both facilities
- f) Communicating with EPA to determine their direction, etc.

ADDITIONAL SERVICES REQUIRED

The following are recommended actions:

- a) Removal and proper disposal of the existing containerized asbestos located outside and adjacent to the south end of the Branch Metal building.
- b) Asbestos abatement of the original buildings 1 & 2. This will include isolating the main building (No. 3) by the use of heavy polyethylene materials. These barriers will need to remain until Building 3 is abated and finally cleared.
- c) Asbestos abatement of Building 3.
- d) Asbestos abatement of the adjacent large vacant warehouse.
- e) Asbestos debris clean-up of several outside areas.
- f) Air monitoring through clearance and project supervision by an accredited person during abatement

In addition, you might also consider providing asbestos health and safety awareness training to Branch Metal workers. An environmental compliance audit is recommended to meet current environmental standards. This would include a review of practices relating to your use, storage, transporting and disposal of any hazardous chemicals. An environmental site assessment of the property should be considered, to include addressing outside petroleum storage tanks, remediation of landfilled asbestos-containing piping debris, removal of existing, stored transite materials, or other observed conditions which might cause impairment to human health and the environment. Addressing these issues should also make the property easier to lease or sell. Performing this assessment should also reduce the potential for any future liability associated with your current ownership of the property.

SCHEDULE

Geotechnology, Inc. is prepared to continue with the scope of services as outlined. Current plans include meeting with abatement contractors at the Branch Metal facility to outline the scope of abatement services required at that facility. Upon selection of the contractor by December 31, 1992, notification can be made to the regulatory agency and work can begin possibly the first week of January, 1993. Abatement at the vacant warehouse could also be initiated at this time.

COMPENSATION

Services performed to date have accrued to Thirty-Three Hundred Dollars (\$3,300). We would estimate additional services, if performed as referenced above to be approximately Two Thousand Dollars (\$2,000). In order for Geotechnology, Inc. to proceed with the current and proposed additional services, we must receive compensation of these amounts immediately.

Geotechnology, Inc. has been pleased to be of service to PG Investments to date and looks forward to continuing to serve you. You may authorize us to proceed with additional services by forwarding payment immediately of the above referenced amounts and signing and returning a copy of this document. Services will be performed in accordance with the previously executed terms for Geotechnology's services, except that payment is required in advance.



PG Investments
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Please contact me if you have any questions or require additional information relating to the services performed or anticipated. As recently discussed, we will be meeting with abatement contractors on Tuesday, December 29, 1992 at 10:00 A.M. for the purpose of reviewing the scope of work at the Branch Metal facility. It would be beneficial if you could plan to be there.

Very truly yours,

GEOTECHNOLOGY, INC.

W. Gary Simmons
Associate

WGS:wgs/tlp

I authorize the work to proceed.

Name and Title

Company

Signature

1/12/93

Date